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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,590	10/11/2001	Dean Bernard Jacobs	BEAS-01077US2	8686
23910 FLIESLER ME	7590 10/03/2007 EYER LLP		EXAMINER	
650 CALIFORNIA STREET			OSMAN, RAMY M	
14TH FLOOR SAN FRANCISCO, CA 94108			ART UNIT	PAPER NUMBER
			2157	
			MAIL DATE	DELIVERY MODE
			10/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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- 1 - 1	Application No.	Applicant(s)	
	09/975,590	JACOBS ET AL.	
Office Action Summary	Examiner	Art Unit	
	Ramy M. Osman	2157	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D/ - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).	
Status			
 1) ⊠ Responsive to communication(s) filed on 19 Ju 2a) ☐ This action is FINAL. 2b) ⊠ This 3) ☐ Since this application is in condition for alloware closed in accordance with the practice under E 	action is non-final. nce except for formal matters, pro		
Disposition of Claims			
4) Claim(s) 1-41 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 1-41 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o	wn from consideration.		
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ijected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	is have been received. Is have been received in Applicate rity documents have been received in PCT Rule 17.2(a)).	ion No ed in this National Stage	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate	

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DETAILED ACTION

Status of Claims

1. This communication is in response to RCE amendment filed July 19, 2007, where applicant amended claims 1,5,14,19,20,21,31,32,33,34,35,38,39,40,41. Claims 1-41 are pending.

Response to Arguments

2. Applicant's arguments and amendments, filed 7/19/2007, with respect to the rejection(s) of claim(s) 1-41 under 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Miron as outlined below.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1,5,14,19,20,21,31,32,33,34,35,38,39,40,41 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 5. Claim 1 recites the limitation "the data stored on the master server" in line 4.
 - Claim 1 recites the limitation "the present state" in line 4.
 - Claim 19 recites the limitations "the prior state" and "the new state" both in line 5.
 - Claim 20 recites the limitation "the data on the slave server" in line 8.
 - Claim 20 recites the limitation "the prior version number" in line 9.

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Claim 20 recites the limitation "the new version number" in line 15.

There is insufficient antecedent basis for these limitations in each of the claims.

Furthermore, the other independent claims repeat the same or similar limitations which also lack antecedent basis.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 7. Claims 1-41 rejected under 35 U.S.C. 102(e) as being anticipated by Miron (US Patent No6,401,239).
- 8. In reference to claims 1 and 5, [Based upon the claim language of claim 1:] Miron teaches a method for replicating data from a master server to a slave server over a network, the method comprising the steps of:

sending a packet of information from the master server to the slave server, the information relating to a change in the data stored on the master server and containing a version number for the present state of the data, the packet of information including first updated information for the data (column 12 lines 49-55);

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thereafter, allowing the slave server to determine whether the data on the slave server has been updated to correspond to the version number contained in the packet (column 12 line 64 – column 13 line 14);

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thereafter, requesting a delta be sent from the master server to the slave server if the data on the slave server does not correspond to the version number contained in the packet, the delta containing information needed to update the slave server (column 6 lines 45-50 and column 7 lines 60-65).

- 9. In reference to claim 2, Miron teaches a method according to claim 1, further comprising: storing an original copy of the data on the master server (column 8 lines 15-30 & 49-67).
- 10. In reference to claim 3, Miron teaches a method according to claim 1, further comprising: persistently caching the data on a local disk for each slave server (column 8 lines 15-30 & 49-67).
- 11. In reference to claim 4, Miron method according to claim 1, further comprising: determining a unique version number for the current state of the data on the master server if the data has changed (column 12 line 64 column 13 line 14).
- 12. In reference to claim 6, Miron teaches a method according to claim 5, further comprising: sending the delta from the master server to the slave server (column 12 line 64 column 13 line 14).
- 13. In reference to claim 7, Miron a method according to claim 5, further comprising: committing the delta to the slave server (column 12 line 64 column 13 line 14).

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14. In reference to claim 8, Miron teaches a method according to claim 5, further comprising: updating the version number of the slave server after committing the delta.(column 7 lines 48-65).

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- 15. In reference to claim 9, Miron teaches a method according to claim 5, further comprising: periodically sending the version number from the master server to a slave server (column 12 line 64 column 13 line 14).
- 16. In reference to claim 10, Miron teaches a method according to claim 5, further comprising: sending the version number to a slave server until the slave server acknowledges receipt of the version number (column 12 line 64 column 13 line 14).
- 17. In reference to claim 11, Miron teaches a method according to claim 5, further comprising: including data with the version number that is necessary to update a slave server (column 7 lines 48-65).
- 18. In reference to claim 12, Miron teaches a method according to claim 11, further comprising: committing the data necessary to update the slave server as soon as it is received (column 12 line 64 column 13 line 14).
- 19. In reference to claim 13, Miron teaches a method according to claim 5, further comprising: determining the scope of the delta before sending it from the master server (column 7 lines 48-65).
- 20. In reference to claims 14,19-21 and 38-41, [Based upon the claim language of claim 19:] Miron teaches a method, computer readable medium, system and computer system respectively, for replicating data over a network including a master server and at least one slave server, the method comprising the steps of:

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48-55 and column 6 lines 19-33);

sending a packet of information from a master server to each slave server on the network, the Information relating to a change in the data stored on the master server and containing a current version number for the present state of the data, the information further relating to previous changes in the data and a version number for each previous change (column 12 lines

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thereafter, allowing each slave server to determine whether the slave server has been updated to correspond to the current version number (column 12 line 66 – column 13 line 5);

thereafter, allowing each slave server to commit the information if the slave server has not missed a previous change (column 7 lines 57-65); and

allowing each slave server having missed a previous change to request that previous change be sent from the master server to the slave server before the slave server commits the packet of information (column 6 lines 34-62 and column 7 lines 50-65).

- 21. In reference to claim 15, Miron teaches a according to claim 14, further comprising: committing the packet of information to a slave server (column 12 line 64 column 13 line 14).
- 22. In reference to claim 16, Miron teaches a method according to claim 14, further comprising: aborting the commit of the packet of information if a slave server cannot commit the update (column 4 lines 55-67).
- 23. In reference to claim 17, Miron teaches a method according to claim 14, further comprising: determining the scope of the delta before sending it from the master server (column 7 lines 48-65).

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- 24. In reference to claim 18, Miron teaches a method according to claim 14, further comprising: including the scope of each the previous changes in the delta. (column 7 lines 48-65).
- 25. In reference to claims 22, Miron teaches method according to claim 21, further comprising: determining whether each of the at least one slave server can commit the data (column 12 line 64 column 13 line 14).
- 26. In reference to claim 23, Miron teaches method according to claim 21, further comprising: determining whether each of the at least one slave server has sent a response back to the master server (column 12 line 64 column 13 line 22).
- 27. In reference to claim 24, Miron teaches method according to claim 21, further comprising: determining whether any of the at least one slave server can commit the data (column 7 lines 5-67).
- 28. In reference to claim 25, Miron teaches method according to claim 21, further comprising: committing the data only if each of the at least one slave server can process the commit (column 12 line 64 column 13 line 14).
- 29. In reference to claim 26, Miron teaches method according to claim 21, further comprising: aborting the data only if any of the at least one slave server cannot process the commit (column 7 lines 55-57).
- 30. In reference to claim 27, Miron teaches method according to claim 21, further comprising: committing the data to those slaves that are able to process the commit (column 12 line 64 column 13 line 14).

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31. In reference to claim 28, method according to claim 21, further comprising: multicasting the update to any of the at least one slave server that were not able to process the commit (column 12 line 35 – column 13 line 14).

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- 32. In reference to claim 29, Miron teaches method according to claim 21, further comprising: heart beating the new version number to any of the at least one slave server that were not able to process the commit (column 7 lines 48-65).
- 33. In reference to claim 30, Miron teaches method according to claim 21, further comprising: requesting a delta be sent to a slave server that was not able to process the commit (column 12 line 64 – column 13 line 14).
- 34. In reference to claims 31-37, [Based upon the claim language of claim 31:] Miron teaches a method, a computer readable medium, a computer program product, and a system respectively, for replicating data over a network, the method comprising the steps of:
- (a) determining whether the replication should be accomplished in a one or two phase method (column 4 lines 57-67 and column 5 lines 30-40);
- (b) sending replication information determined to be accomplished in a one phase method by:

sending a packet of information from the master server to the slave server, the information relating to a change in the data stored on the master server and containing a version number for the present state of the data; thereafter receiving the packet of information to a slave server (column 12 lines 48-55 and column 6 lines 19-33);

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thereafter, allowing the slave server to determine whether the data on the slave server has been updated to correspond to the version number (column 12 lines 66 – column 13 line 5); and

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thereafter, requesting a delta be sent from the master server to the slave server if the slave server does not correspond to the version number, the delta containing information needed to update the slave server (column 6 lines 34-62 and column 7 lines 57-65);

(c) sending replication information determined to he accomplished in a two phase method by:

sending a packet of information from the master server to the slave server, the information relating to a change in the data stored on the master server and containing a version number for the present state of the data (column 12 lines 48-55 and column 6 lines 19-33);

thereafter, allowing the slave server to determine whether the slave server has been updated to correspond to the version number, and to further determine whether the slave server can process the packet of information (column 12 lines 66 – column 13 line 5);

thereafter, sending a signal from the slave server to the master server indicating whether the slave server needs to be updated and whether the slave server can process the packet of information (column 6 lines 34-62 and column 7 lines 57-65);

thereafter, sending a response signal from the master server to the slave server indicating whether the slave server should commit to the packet of information; and

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committing the packet of information to the slave server if so indicated by the response signal (column 12 lines 66 – column 13 line 22).

Conclusion

- 35. The above rejections are based upon the broadest reasonable interpretation of the claims. Applicant is advised that the above specified citations of the relied upon prior art are only representative of the teachings of the prior art, and that any other supportive sections within the entirety of the reference (including any figures, incorporation by references, claims and priority documents) is implied as being applied to teach the scope of the claims.
- 36. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached Form 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramy M. Osman whose telephone number is (571) 272-4008. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RMO September 28, 2007